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FOREIGN AGRICULTURE REPORT

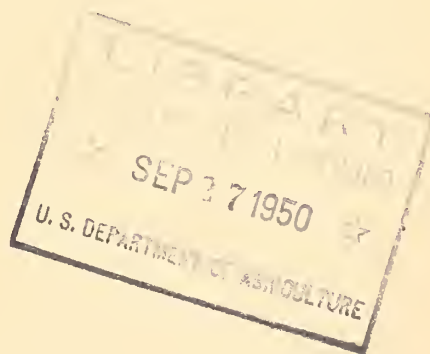
OFFICE OF
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✓ OUTLOOK FOR IMPORTS OF
UNITED STATES DAIRY PRODUCTS
IN VENEZUELA ✓

by

GEORGE H. DAY
Agricultural Economist



FOREWORD

Venezuela is a market for significant quantities of United States dairy products, particularly dry whole milk. By far our biggest foreign outlet for dry whole milk, Venezuela took the equivalent of 30 percent of our total production in 1949. It also has been a market for about a million pounds each of United States cheese and butter annually and large quantities of modified milks from this country. Surveys indicate, however, that many of Venezuela's people are not getting adequate quantities of the nutrients found in milk, and the country has an opportunity to improve dietary levels by expanding consumption of milk in several forms. So far, dairy production in Venezuela has been limited, in spite of protective tariffs and production subsidies, and that country probably will continue to be an important market for imported dairy products. Possibly even more significant to United States producers is the fact that Venezuela with its large volume of petroleum exports is one of the few countries of the world having plentiful dollar exchange.

Recognizing the importance of the Venezuelan market, the Office of Foreign Agricultural Relations in early 1950 conducted a study of that country as part of a broader dairy marketing survey covering 10 Caribbean areas. The first-hand study was conducted by George H. Day, Agricultural Economist. In addition to Venezuela, Mr. Day covered Cuba, the Netherlands West Indies, Colombia, Panama, Costa Rica, Mexico, Honduras, El Salvador, and Guatemala. The study was aimed at two general objectives: (1) evaluation of long-term marketing prospects for each dairy product and (2) solution of current marketing problems. This report presents the results of the survey in Venezuela.

This study was conducted under the provisions of the Research and Marketing Act of 1946. The possibilities of broadening and maintaining foreign markets for other agricultural commodities also are being studied by this Office. The findings are presented in other circulars and reports that may be obtained, free, from the Office of Foreign Agricultural Relations, United States Department of Agriculture, Washington 25, D. C.

Joseph A. Becker
Joseph A. Becker
Chief, International
Commodities Branch

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Additional credits to sources used appear in the footnotes.

Outlook for Imports of United States Dairy
Products in Venezuela

By George H. Day
Agricultural Economist

Summary

The outlook for Venezuelan imports of United States dairy products depends, more than anything else, upon the outlook for exports of petroleum. Much depends on future actions taken by the United States Government with respect to allocations and import duties applicable to Venezuelan petroleum and its derivatives. Other factors include the extent of the European demand for petroleum and of the output of oils from the Middle East. The United States imports and consumption of petroleum are now at a high level, however, and the outlook appears generally favorable to the Venezuelan economy.

While there seems to be no likelihood of limitations on dollar exchange in the near future, there has been a recent tendency on the part of the Venezuelan Government to increase its restrictions on imports of dairy products, especially butter, dry whole milk, evaporated milk, and condensed milk, in an attempt to induce greater national production of these products.

With respect to dry whole milk, which in 1949 represented 80 percent of the value of our dairy product exports to Venezuela, the Venezuelan Government issued regulations effective June 1, 1950, requiring distributors, who expect to continue importing this product duty free, to purchase at a loss the local product at a ratio of 1 pound to 8 pounds of imported dry whole milk. Although dry whole milk can be imported by payment of duty, the tariff rate makes this alternative impracticable. Imports, mostly from the United States, are expected to be reduced by at least 15 million pounds a year as long as this ratio remains in effect, unless prices increase enough to encourage imports over the full tariff.

Although butter continues to be subject to full duty, similar quota regulations are applicable to that product. Imports are expected to continue at around 1949 rates with some trade lost to European sources.

Imports of cheese continue to pay the full duty. Imports from the United States have recently been sharply reduced by increasing imports of lower cost cheese from European countries, but imports of American processed type cheese are expected to continue, although in moderate quantities.

Evaporated and condensed milk, on which full duties became effective early this year, show little likelihood of occupying more than a very minor role in Venezuelan imports. The outlook is clouded by a gradual increase in local production, a general preference for dry whole milk, and a threat of imports from Canada and Europe.

Imports of nonfat dry milk solids, while still small, are being increased as the use of this product in processing and manufacturing foodstuffs becomes understood and its advantages are appreciated. There is a limited but increasing use in school lunch and other low-cost feeding programs, but its use in consumer packages or in the reliquefaction of milk beverages is not yet permitted. Until its home use is encouraged, the growth in imports, mostly from the United States and Canada, is likely to be slow.

Only a gradual increase in Venezuelan production of milk and dairy products is likely. (See Late Developments, on outbreaks of foot-and-mouth disease.) Although production and marketing problems are gradually being solved, it is an industry beset with high costs, primitive methods, low producing cows, and serious transportation problems. In general, the outlook for United States exports is limited largely by the extent of import restrictions and increased competition with lower-priced goods from other areas.

While Venezuelan milk production may ultimately be great enough to supply the needs of the country, there is ample evidence from past production records that the problem of encouraging production must be solved by more positive means than by protective measures.

LATE DEVELOPMENTS

Foot-and-Mouth Disease Recently Occurred in Venezuela

A press release dated July 28 states that the United States Department of Agriculture has been officially notified of outbreaks of foot-and-mouth disease in Venezuela. The disease apparently has appeared at points in the Central milkshed including the Caracas Valley, the States of Miranda and Aragua, and the important producing area around Lake Valencia (State of Carabobo) where milk production is reported to be reduced 50 percent below normal. Outbreaks also have been reported at divergent points in the llanos including the State of Apure, which borders on Columbia. With much of this area unfenced and cattle free to roam, the seriousness of the existence of the disease in the plains is apparent.

Insofar as is known, no outbreaks have occurred in the important milk producing sections of Zulia where all of the processed milks, most of the butter, and some of the cheese are produced.

The Venezuelan Government has appropriated 5 million bolivares (about U.S. \$1,500,000) to combat the disease and has provided for the establishment of an executive committee to be charged with planning and directing the anti-aftosa campaign. The Government is bringing experts from several foreign countries and is importing a large quantity of vaccine.

While the full extent of the damage is not yet known, it seems probable that the production of milk in the Central milkshed and of llanero cheese will be affected for some time and the national supply of meat and dairy products reduced. It is not yet known whether any Government action will be taken with respect to imports of these products.

Production, Distribution, and Utilization
of Milk in Venezuela

The present milk producing areas of Venezuela, from the standpoint of milk utilization, herd types, and marketing characteristics, can be divided into two rather distinct types: (1) those producing milk primarily for fluid use and (2) those where, of necessity, all milk in excess of that needed by the ranch family and the calves must be disposed of as cheese or as other manufactured products.

The first group, comprising primarily the milksheds for the major cities, is characterized by: (1) a trend toward the use of commercial dairy herds, (2) the nearness and accessibility of large fluid milk consuming areas, (3) relatively greater attention to disease control and sanitation, and (4) a generally increasing (though far from adequate in terms of need) volume of milk production.

By far the most important of these areas is the Central milkshed comprising areas in the Federal District and the States of Miranda, Aragua, and Carabobo and serving the most populous area of Venezuela. In addition to the cities of Caracas, La Guaira, Maracay, Valencia, and Puerto Cabello, this marketing area includes half a dozen large towns and Venezuela's main commercial and financial area. Sometimes included in the general Caracas marketing area, but separate from the Central milkshed, are smaller producing areas supplying Barcelona to the east and the Rio Yaracuy area supplying San Felipe in Barquisimeto to the west of Caracas.

The second milkshed in importance is that supplying the city of Maracaibo and extending southwest along a paved highway toward Machiques. Although the cattle used for milk in these areas are mostly low producers of Creole and mixed blood, there is an increasing number of purebred dairy herds in the highlands of the Central milkshed.

The second group comprising primarily general farming and range country is characterized by (1) the use of dual-purpose cattle kept primarily for beef and (2) the lack of availability of transportation and marketing facilities suitable for the sale of milk in fluid form.

The two most important areas in this general category are the llanos, a vast grazing area extending eastward across the country from the Andes and south from the coastal range to the Orinoco and Meta Rivers, and the Lake Maracaibo basin in the State of Zulia with its fertile, general farming areas. A similar type of milk production and use is found in other less accessible plains and valleys throughout the country.

Livestock and dairying have continued to be of minor importance in the Andean highlands where corn, grain, and coffee are intensively cultivated under primitive conditions on small farms.

There are no data available on the number of cows milked and very little on production and utilization of the milk produced. However, there is usable information relative to milk receipts and production per cow in the Central milkshed; the production of butter; the production of canned and dried milk and its distribution; and farming operations, including production per cow and production of dairy products, in Zulia, a major milk producing area. Also available are a 1937 census, by states, of total cattle numbers; fragmentary information on the percent of cattle milked; and general information relating to cheese production. From the above information and other indications it has been possible to make preliminary estimates of milk production and utilization which, though undoubtedly subject to a wide range of error, may be useful in evaluating the Venezuelan supply and consumption pattern.

On the basis of the above, milk production in 1949 may be estimated at about 160 million liters (about 360 million pounds), the number of cows milked at slightly over 400,000, and average annual production per cow at about 400 liters (about 900 pounds). This, of course, includes the milk in all products sold, which has been estimated at about 90 million liters (about 200 million pounds), and the milk equivalent of ranch consumption of milk and cheese. The total number of all cattle was assumed to be about 2.9 million head, a decline from that given in the 1937 census (3,090,661 head) with increases in Zulia and the Central milkshed believed to be more than offset by declines in other areas, notably the llanos.

As inferred above, the milk production in the fluid milksheds has been showing a gradual, though perhaps irregular, increase. With the possible exception of the Central milkshed, where a subsidy of 0.2 bolivars* per liter (about U. S. \$2.65 per hundred pounds) is being paid, the increases appear to have been about sufficient to supply only that small part of the population able and willing to pay a high price for fresh fluid milk.

In the Caracas market where the Government has played a major part in the control of fluid milk marketing and prices since October, 1946 ^{1/}, the retail price for fluid milk has been set at 1 bolivar per liter (28.5 cents per quart) since early 1947. At that time the price to producers was set at Bs. 0.75 per liter (nearly U. S. \$10.00 per hundred pounds) at the corral gate, compared with a price of Bs. 0.54 per liter (about U. S. \$7.10 per hundred pounds), originally set in October 1946, at about the end of the rainy (flush) season.

*One bolivar equals about U. S. 30 cents.

1/ The Government, through an autonomous corporation of the Ministry of Development, established a syndicate, (Sindicato de Leche) which acquired ownership and control of all pasteurizing and cooling plants in the Central milkshed. This was done in the belief that the operating economies would permit increased prices to producers to stimulate greater milk production, and possibly in the hope that some reduction in prices to consumers could also be made. The producers were to purchase 45 percent of the stock over a period of years through deductions from their milk checks. Largely because of the inability of the syndicate to achieve its objectives and partly to sidestep the continuous agitation of the producers for higher prices or subsidies, the Government turned over these facilities to the producers in April 1949, retaining only a voice in the management.

With the arrival of the rainy seasons (April - October) of 1947 and 1948, the Government found it impossible to sell all receipts as fluid milk (at 28.5 cents per quart) and had to revert to a form of blend pricing which reduced averaged returns toward the level originally established by the syndicate. After about 4 months of the dry season, November - March (1948-49), and considerable pressure by producers for a further price increase, the Government early in 1949 granted a subsidy to fluid milk producers in the Central milkshed amounting to Bs. 0.2 per liter. This brought the dry season returns to about Bs. 0.90 per liter (nearly U. S. \$11.90 per cwt.) with a seasonal decline during the ensuing flush. Early this year (1950) producers petitioned for an additional subsidy.

Although these returns appear extremely high, they are explainable in large part by conditions of high cost to the milk producer in the Central milkshed. Concentrate feeds are scarce in Venezuela, and the Government has recently established an import duty of about U.S. \$45 per ton on mixed animal feeds. To get dependable labor, the milk producer must compete with high wages of the oil companies and other industries. The cost of materials and equipment, much of which are imported, is high. The cost of nationally produced equipment is inflated by the country's oil economy. An extremely low yield per cow contributes to a high unit cost.

Following the inauguration of this subsidy in early 1949, receipts in the Central milkshed, which had fluctuated irregularly during the preceding five years, responded sharply. From an average rate about the same as that of a year earlier in January and February, receipts increased to a volume appreciably greater than a year earlier during the 1949 flush, and showed little or no tendency to decline well into the dry season. Although this is explainable partly by late rains and continued good pastures, it is apparent that the Bs. 0.2 subsidy effectively stimulated milk production. Total receipts in 1949 were at least 20 percent greater than a year earlier. While production in the Central milkshed may account for only about 15 percent of that for the entire country, a sharp increase in this area more than proportionately affects the demand for imported processed milks, a large part of which is marketed in this area. Even though fluid milk consumption is not increased, this means a greater use of local milk in such products as ice cream, confections, and bakery goods, normally representing an outlet for imported dried and canned milks.

It seems likely, however, that the present rate of increase will not continue under present conditions. The volume of fluid milk that can be sold at the retail price of 28.5 cents a quart has been demonstrated to be limited, and any worthwhile increase in fluid consumption probably can be achieved only at a considerable reduction in price. Thus, further increases of milk production may be sufficiently burdensome to depress average returns on all milk toward the level of prices in effect before the subsidy was granted, and additional subsidies would largely defeat their own purpose.

Milk production in Zulia is at least as important in its effect upon imported dairy products as that in the Central milkshed. All of Venezuela's dried milk and concentrated milk is produced in one plant located at Santa Barbara in the heart of an important production area just south of Lake Maracaibo. In addition, about 95 percent of the country's butter is produced in Zulia from about six creameries located in Maracaibo (2), Encontrados (2), Carmelo (1), and at Machiques (1), a creamery located in the center of a large farm-separated-cream area with a radius of about 50 miles. A large quantity of cheese is also produced in Zulia, as well as fluid milk for Maracaibo and other small towns.

Zulia probably accounts for over 35 percent of Venezuela's total milk production and a somewhat greater part of commercial milk and dairy products. While there is a concentration of commercial dairy herds supplying fluid milk to Maracaibo, which extends southwest along a paved highway toward Machiques, most of the milk in Zulia is produced from dual-purpose cattle kept mainly for beef, and the difficulty of transportation renders its use impracticable in any form other than manufactured dairy products. While, as elsewhere throughout the country, most of the cheese is made by hand under primitive and unsanitary conditions, at least one cheese factory is now operating in the Santa Barbara area.

On the basis of the amount of milk used in the production of dry whole milk, condensed and evaporated milk, and butter, the only products for which data are available, there has been little or no increase in Zulia's milk production over the last 4 years. This statement takes into account the operations of a cheese factory started in 1949. It seems unlikely that the change in the production of farm-made cheese or in the sale of fluid milk, even if known during this period, would be sufficient to alter this impression. A sharp increase in the production of processed milk in 1949 over 1948 is accounted for by a temporary closing down of the plant for improvements in 1948 and a corresponding diversion of milk to butter production. The amount of milk used in both products declined slightly from 1948 to 1949. In view of the fact that the major source of income from cattle in this area is beef and that only a small proportion of the cows are milked, an appreciable increase in milk returns would be necessary to increase milk production substantially.

The llanos, which furnish grazing land for the bulk of Venezuela's cattle, is a natural range country with alternating wet and dry seasons, and is little adapted to dairying. While little effort is made to control grazing or breeding, there has been some use of dairy bulls by ranch owners who milk some cows part of the year and, in addition to using some fluid milk, produce large quantities of homemade llanero cheese, which is generally consumed or marketed locally. Since most of the cattle are of Creole or unknown mixed breeds and the milking period rarely exceeds 6 months, the average annual production per cow is low. Even though a small percentage of the 2 million estimated cattle in this area are milked, it seems possible that this area may account for around 40 percent of Venezuela's total production and the major part of Venezuela's white ranch cheese. The main product of this area is beef, but solution of the problems of transportation to the main centers of consumption in the Caracas area has shown little progress, and the problem of marketing has become greater. The

system of driving cattle from the llanos to pastures in the Lake Valencia basin, which formerly served as a recovery area and reservoir of beef for nearby cities, is being interrupted by the diversion of these pastures to crop land. Accordingly, unless somewhat better transportation is provided from the llanos, the returns to ranchers may decline. This prospect, together with a gradual decline in the quality of the ranges, the increasing competition of imported beef, and the drain of the oil and other industries on labor, make unlikely any increase in milk and cheese production in these areas.

While little is known about the other milk producing areas of Venezuela, it seems unlikely that any increases of production along the Rio Yaracuy or in the Barcelona milkshed would be sufficient to reflect an increase in production for the balance of the country.

In summary, it seems likely that milk production in Venezuela in 1949 increased slightly over that of 1948, with virtually all of the increase in the Central milkshed where production was favored by a special producer subsidy and late pastures.

Prospective Production of Milk and Dairy Products in the Near Future

Although milk production in the Central milkshed increased sharply in 1949, the increase for the country as a whole was moderate, and further increases are likely to be only gradual as long as present economic conditions of relatively high cost continue to exist. Any improvement in the production of feedstuffs, in breeding, and in dairy farm management will likewise be gradual.

In the Central milkshed, a Government subsidy which was granted to producers in early 1949 apparently induced greater milk production, but prices for the resulting surplus above fluid needs deprived them of its full effect. Any further increase as a direct inducement to production in the Central milkshed probably will be burdensome and the results disappointing.

Any increase in production for fluid milk is limited by the high cost of local dairy labor and of dairy equipment, most of which must be imported. Although dairymen have to depend on imports for much of their feed concentrates, a heavy duty (about \$45 a ton) was recently imposed on mixed feed imports as a measure to protect local feed processors. A campaign recently begun by the animal husbandry division of the Ministry of Agriculture and Animal Husbandry to eliminate tubercular cattle from the Central dairy herd may disrupt production if the program is effectively carried out.

The problem of assembling, transporting, and distributing milk for Caracas is also serious 2/. Until recently these marketing operations were performed

2/ Until recently pasteurized milk for Maracay has been reshipped from Caracas back to Maracay for distribution. A pasteurization plant has recently been installed in Maracay to eliminate this backhaul.

by the Government. After suffering a considerable loss on these operations and with producers continuously clamoring for higher prices, subsidies, or control of the distribution system, the Government signed an agreement of sale to the producer organization.

In Zulia, a producer association supplying the Santa Barbara milk processing plant has benefited by a recent agreement guaranteeing the members Bs. 0.4 per liter (about U. S. \$5.30 per cwt.) for their entire production. Since this will merely restore to them the returns reportedly paid in 1947 and early 1948, it is questionable whether it will serve as an inducement to greater production than was achieved in 1947, or will merely divert some milk from cheese or butter production.

The high wages being paid by the oil companies have attracted some of the best potential farm labor, and many others have moved to the oil fields in the hope of obtaining work. Additional workers have moved to urban areas to work in construction, service, and light manufacturing industries, stimulated directly or indirectly by oil incomes. The relatively hard work and low income from dairying has made the return to farm labor unattractive.

The Outlook by Commodities

Fluid Milk

The supply, quality, and price structure for fluid milk in the Central milkshed have a significant bearing on the demand for, and imports of, dairy products, especially dry whole milk. Most of the country's dry whole milk is believed to be consumed in the large urban centers of this area.

The bulk of the Caracas fluid milk comes from a relatively small number of medium to large dairy farms, with over half of it originating in the States of Aragua and Carabobo. The balance comes from the Federal District and Miranda. While some dairies are run on an efficient up-to-date basis, the bulk of the milk is reportedly obtained from low yielding cows milked in undrained corrals under unsanitary conditions. With both tuberculosis and brucellosis widely existent throughout the milkshed it is understandable that about 70 percent of the milk is reportedly boiled by consumers in spite of pasteurization. Even with a conscientious and consistent effort to eliminate parasites and diseases and to correct sanitary conditions in line with existing regulations, considerable time will be required to restore full confidence in the milk supply.

Nearly all of the fluid milk for Caracas and nearby cities and most of that for Maracay is now being pasteurized and distributed by the producer association which took over the distribution system from the Government under an agreement of sale signed in early April 1949.

The problem of milk assembly and distribution for Caracas is tedious. Most of the milk is assembled at a cooling plant in Maracay one day, is transported to Caracas and pasteurized the following day, and is distributed to stores and homes on the third day. Until early January of this year when pasteurizing equipment was installed at Maracay, the milk for this city was hauled back from the Caracas pasteurizing plant.

Most of the milk in this area is distributed from a large number of small stores or bodegas inadequately equipped with cooling facilities. Home delivery, the volume of which increases during the flush season, is believed to account for not more than 10 percent of total milk sales in Caracas. In order to overcome the danger of undesirable practices and the perennial shortage of milk bottles, the Government recently advanced funds to purchase and install a paper-bottling machine. The Government syndicate already had consolidated all pasteurizing operations in one plant.

Shortly after the Government syndicate turned over the control of milk distribution in the Central milkshed to the producers, the operation of the pasteurization plant in Valencia (western part of the Central milkshed) was sold to an organization jointly owned by VBEC ^{3/}, Golden State, and a small group of local producers. Supplied under contract by producers in Carabobo apparently at returns which include the Government subsidy and other incentives, this company ("Inlaca") is understood to be distributing milk in Valencia, Puerto Cabello, and Maracay and small quantities in Caracas. This milk is distributed through vendors in paper cartons to homes and stores at retail prices about the same as those in Caracas.

Per capita consumption of fluid milk in the Caracas market at the present price of 28.5 cents per quart (or more) is extremely low. The daily average sale of approximately 50,000 liters (52,800 quarts) is believed to supply fewer than 100,000 people of this market of about 500,000. The balance of those in this area, predominantly with low incomes, are dependent on dry whole and canned milk.

It is estimated that 10 percent or more of those in this market get no milk at all, and the diet of probably half of the population in this city is deficient in milk nutrients. In other cities and especially in small towns the situation is believed to be considerably worse.

^{3/} The Venezuela Basic Economy Corporation (VBEC) is an organization financed largely by the oil companies with Government help, to improve the production (beef, fish, milk, etc.) and distribution (warehousing, wholesale stores, and milk distribution) of food in Venezuela. It is discussed in more detail in the section, Characteristics of Venezuelan Markets for Dairy Products.

Imported chocolate drink has been successfully sold in Venezuelan markets in recent years. There reportedly is a market for a quality product of good flavor if adequately promoted and offered at a reasonable price. Price competition has recently been heavy. The sale of local bottled, reliquefied chocolate drink has been discouraged by the Health Ministry because of its lack of adequate personnel to inspect the uniformity of a reconstituted product for which original samples may have been satisfactory.

Dry Whole Milk

The outlook for imports of United States dairy products to Venezuela is largely the outlook for dry whole milk. With the majority of the rural population unable to buy fluid milk at prices which are anywhere within the range of production costs under present economic conditions, this food represents one of the most promising means by which the Venezuelan people can hope to obtain the food value of whole milk. At the same time, being a market of great potential magnitude, it is one in which, given free play, competitive economic forces can contribute the greatest good to the greatest number of those with moderate economic means.

The average annual production of dry whole milk in Venezuela, as indicated by the reported output of the one processing plant at Santa Barbara, has been about 2,500,000 pounds during the last 4 years of operation. The estimated production for 1949 of 2.4 million pounds represents a sharp increase (29 percent) over 1948. The increase can be explained by the temporary closing down of drying operations for plant improvements in 1948. Imports, nearly all of which originated in the United States, are estimated at 38 million net pounds (compared with United States reported exports to Venezuela of 39.7 million pounds) 4/. Thus, even though a carry-over of about 3 million pounds into 1950 were assumed, a 1949 consumption of about 37 million pounds (over 8 pounds per capita) would seem a reasonable estimate. When this is compared with an estimated consumption of 15 to 20 million pounds of cheese, the only other dairy product generally available to Venezuelans, the importance of dry whole milk to the Venezuelan diet stands in clear perspective. The growth in demand for this product has been little short of phenomenal. With total consumption in 1944 estimated at about 6 million pounds, all of which was imported, this sixfold increase has been the result of the growing appreciation of this product and, more recently, a sharp decline in prices. The possibilities of its greater use are indicated by the considered belief that it has been purchased by less than 15 percent of the population.

From November 1946, when this product was permitted duty-free entry, until mid-1949, the retail price per pound in 1-pound cans remained at about U.S. 75 cents. The retail price range for dry whole milk in 5-pound tins was around U.S. 70 cents per pound. During this period Zulia milk producers seemed reasonably content, and there was no serious pressure to restore duties.

4/ Since official import tabulations report all types of milk in one combined total, separate data on imports of dry whole, condensed, evaporated, or nonfat dry milks are not available.

About July 1949 a severe price war developed. By mid-fall the price per pound in 5-pound cans on the "free" markets had declined to U. S. 49.5 cents, and by early 1950 dry whole milk was widely available at 51 cents per pound. Price reductions apparently were aimed at the introduction of competitive brands (of which there are about 40) among lower income groups, and the price on the free markets in 1-pound cans was reduced to a level barely 3 cents per pound higher than the price in 5-pound cans (compared with the normal differential of 5 to 6 cents).

In an effort to meet this competition, the local milk drying plant (Indulac) which had already (1948) reduced its paying price to producers from Bs. 0.4 per liter (about U. S. \$5.30 per cwt.) to Bs. 0.3 (about U. S. \$3.98 per cwt.), threatened a reduction to Bs. 0.2 (about U.S. \$2.65 per cwt.) to be effective early this year.

Desirous of protecting Venezuela's milk drying industry and increasing returns to dairymen supplying milk to the processing plant, the Minister of Development conferred with those interested, relative to a solution of the problem. On March 22, 1950 5/, the Ministries of the Treasury and of Development published a resolution in the nature of a decree, directly affecting both local and imported dry whole milk, stating that its conditions were based on an agreement among the Zulia producers' association supplying the plant, Indulac and the importers.

Among the provisions of the resolution was the requirement that Indulac immediately start paying producer-members of the Rural Association of Zulia Bs. 0.4 per liter of fresh milk purchased and that association members sell to Indulac their entire milk production. The resolution also froze prices in effect March 22 to the retailer and to the public on both domestic and imported dry whole milk until June 1, at which time specific price ceilings went into effect. Until June 1, importers were required to obtain licenses to import in quantities not to exceed their respective imports during the 3 months immediately preceding March 22. Effective June 1, in order to obtain duty-exempt import licences, importers were required to present to the National Supply Commission cancelled invoices of national product purchased in the ratio of 1 pound of domestic powder to every 8 pounds of foreign powder they plan to import. Indulac was directed to sell the dry milk requested of it, and controversies over such requests were to be decided by the Ministry of Development after appropriate hearings.

The controversial schedule of maximum prices, effective June 1, which is administered by the National Supply Commission, provides wholesale prices of national product to importers of U. S. 86 cents per pound for a case of 12 1-pound cans and U. S. 78 cents per pound for a case of six 5-pound cans. Maximum prices to retailers are set at U. S. 50 cents per pound for a case

of 12 1-pound cans and U. S. 44.5 cents per pound for a case of six 5-pound cans. Thus, the independent importer must bear a price loss of up to U. S. 36 cents on each pound of local product purchased. Maximum retail prices per pound on national product are set at U. S. 60 cents per 1-pound can and U. S. 49.5 cents per pound in 5-pound cans. Retail ceilings on imported dry whole milk are 72 cents per 1-pound can and U. S. 67.2 cents per pound in 5-pound cans.

While the desire to encourage local production of dairy products is commendable, there appears some question whether this move may not prove inequitable to distributors if not to local manufacturers of other dairy products and reduce supplies available to the bulk of low income consumers.

The principal undeveloped market appears to be low income groups in cities and rural communities accessible to Caracas and Maracaibo. The palatability and sanitary quality of the product, the general lack of home cooling equipment suitable for fluid milk, and its relative cheapness are advantages being given increased recognition. Venezuelans have become increasingly discriminating in their appreciation of flavor and uniformity, and it is important to capitalize on these qualities. There is a preference for the imported over the local product. Sturdy 1-pound, gas-packed, self-sealing cans with key openers are at present the most popular package. Directions should give in simple terms the desired proportions for mixing and should urge the use of boiled or pure water. Half-pound and other small cans reportedly have not met favorable reception. The sale of 2½-pound cans has also been light. There would probably be a big sale for the product in 3- or 4-ounce envelopes if adequately sealed against moisture and odors.

There has been a continually expanding demand for dry whole milk in 5-pound cans. Middle and upper income families with adequate storage space have found this container convenient and economical. Hotels, restaurants, confectioners, small ice cream makers, and bakers also represent an important part of the market. The larger industrial food establishments use an appreciable quantity in 25-pound gas-packed cans. A few of the largest bakers and ice cream manufacturers buy in 200-pound barrels or drums. Under present regulations, requiring the purchase of 1 pound of national product for each 8 pounds imported on which exoneration is allowed, total imports could decline from the 1949 total of 38 million to not more than 25 million pounds in 1950. However, additional imports may result either from an adjustment of this ratio or from a price increase sufficient to encourage imports by payment of the full duty. If imports of dry whole milk were restored to an unrestricted duty-free basis, permitting a further expansion in consumption among low income groups, a further increase in imports above the 1949 rate would be probable. While the United States is still virtually the only supplier, there is some belief on the part of importers that lower cost Canadian dry milk will become increasingly important.

There has been a slowly increasing demand for milk base, dietetic, and baby foods, most of which have been imported from the United States. Exports of this class of product from the United States amounted to over 3 million pounds in 1949. None of it is produced in Venezuela. While it is all subject to full import duty, the rate is about U. S. 2½ cents per pound,

net, if it is classified under tariff No. 37A: "Modified milk (as to chemical composition) and those for therapeutic uses in the diet of children." Duties on other classifications are higher. These products are sold through pharmacies largely on doctors' prescriptions.

Ice Cream

Although there are no statistics available as to production, the consumption of ice cream and sherbets containing milk solids appears to be growing steadily.

With the possible exception of short periods during the rainy season when milk is in surplus, virtually all of the ingredients are imported. Imports of dry ice cream mix, while showing an irregular increase, have represented a relatively small part of the ingredients used. United States exports of the dry mix in 1949 totaled barely 230,000 pounds. This product is considered to be too high in price, especially when subject to full duty 6/. In addition, many ice cream manufacturers reportedly desire a greater flexibility of the fat solids content of their ice cream than is possible with the direct use of standardized dry mix. Most of the milk solids are imported in the form of dry whole milk, nonfat dry milk solids, dry cream, and unsalted butter.

There are three large ice cream plants in Caracas using modern equipment and producing ice cream of reportedly fair quality. There are about half a dozen smaller plants in this city producing ice cream with reportedly a wide range in butterfat content and in sanitary quality. Venezuelan food and beverage regulations require that the milk used in ice cream be pasteurized and that ice cream shall contain not less than 12 percent cream (crema -- interpreted by the trade as butterfat), but this does not appear to be strictly enforced. Sherbets (required to contain not less than 3 percent butterfat) based on the use of certain tropical fruits are often delicious. American-type ice cream with a relatively high butterfat content is reportedly showing the greatest consumption increase, however.

Ice cream plants are also located in Maracaibo, Valencia, Maturin, Barquisimeto, and in a number of small interior towns. For the most part the ice cream is sold in the immediately surrounding territory due to the lack of refrigerated transports. Distribution of ice cream through ice cream bars or soda fountains has helped to stimulate consumption, as has its sale through hotels and restaurants. The use of pushcarts has also been of importance. There has been an increase in the sale of dry ice cream mix in consumer-size packages through retail stores.

6/ Dry ice cream mix pays a duty of Bs. 1.20 per kg. (about 20 cents per net pound)

Nonfat Dry Milk Solids

The production of nonfat dry milk in Venezuela is negligible, apparently being limited to the drying of an occasional surplus of skim milk at the Santa Barbara condensery-dry milk plant. Production in 1949 is estimated at slightly less than 80,000 pounds. While data on imports of nonfat dry milk are not separately available, most of this product is believed to have originated in the United States, which in 1949 exported 710,000 pounds of this product. This represents the greatest quantity exported to Venezuela since the war, exceeding 1948 exports by 454,000 pounds. Assuming no increase in inventory from the increased exports toward the end of the year, apparent consumption would total 790,000 pounds. This would be somewhat less than 0.2 pounds per capita in 1949 (compared with U. S. consumption of over 3 pounds per capita in that year).

At the present time virtually all of the Venezuelan supply of nonfat dry milk is being used in the processing of dairy products and industrial foods (bakery goods, ice cream, confections, etc.), with possible limited amounts used in the preparation of foods for institutional and low cost feeding programs. Present regulations prevent its use in consumer packages. In addition, as discussed below, its use in the reliquefaction of milk drinks is not permitted.

Industrial foods and ice cream, which have accounted for most of the recent increase in nonfat dry milk consumption, represent a market which, barring the introduction of import restrictions, should continue to expand for some time. While there is still a rather general lack of know-how with respect to its use in candies, bakery goods, and ice cream, there is evidence of increasing interest on the part of food processors in this ingredient as a sales promotion factor.

Candy and chocolate manufacturing industries are estimated to account for 45 percent of the sales of nonfat dry milk. 7/ It is used especially in the making of milk chocolate. While the prospect is for a gradual increasing use of nonfat dry milk, there is a need for useful formulas and sales promotion material prepared in Spanish, with illustrations.

Bakery goods are estimated to account for 30 percent or more of the sales. Of an estimated 500 bakeries in Venezuela, about 5 percent use milk in the baking of bread. Of the large Caracas bakeries most use nonfat dry milk; others use only dry whole milk or both dry whole and nonfat dry milk. A few small bakeries are also using dry milk. Nonfat dry milk is used in bread, sweet crackers, cookies, pastries, rolls, and other products. The largest bakeries make both sweet and soda crackers. A number of oil camps also are making milk bread.

7/ These estimates of utilization were obtained from a despatch of the United States Embassy, Caracas, dated October 3, 1950.

This industry represents somewhat the greatest potential use of nonfat dry milk in industrial foods. There is considerable need for the know-how as well as the why of using nonfat dry milk in Venezuelan bakery goods. A large bakery organization in Maracaibo, as well as some of the leading bakeries of Caracas, are reported to need technical help in their desire to make top quality milk bread. Illustrated formulas and directions, in Spanish, would be of considerable help in producing bread of desired uniform quality. While this type of bread is now being used principally by other than nationals, an educational and promotional program based on bread of milk content and uniform quality could considerably improve Venezuelan diets and greatly increase the market for nonfat dry milk.

Ice cream represents the third industry in importance in the use of nonfat dry milk, accounting for about 15 percent of the total. This growing industry should represent a large potential market for nonfat dry milk as the methods of its use are understood and its advantages, in gaining a standardized product of full body and flavor, are appreciated.

The amount of nonfat dry milk used by other food processing industries (meat products, cheese processors, etc.) is negligible.

Nonfat dry milk imports are subject to the full duty applicable to preserved milks, amounting to Bs. 0.50 per gross kilo (approximately 8 cents per pound, net basis). While exoneration of duties may be obtained under certain circumstances through the Ministry of Development, some processors have reported that the advantages gained were more than offset by the amount of detail necessary to secure free entry of this product.

Institutional uses at present account for about 5 percent of the total consumption of nonfat dry milk. Some of this milk is understood to be used in the Venezuelan Government's rapidly expanding school lunch program, in the low cost meals presently being served in cafeterias to large groups of day laborers at nominal cost, and to persons in state institutions. These programs should represent a continually growing use for this product. Since only a few factories and commercial firms provide eating facilities for their employees, its potential use in in-plant feeding is quite limited.

There is a great need for the nutrients of milk in the smaller cities, and in rural areas during the dry season, especially among the mass of low income people who cannot buy milk at any price now foreseeable. The Government is giving considerable thought to methods of making nonfat dry milk available to these people without replacing any of the whole milk products now being consumed by those who can afford them. If a satisfactory plan can be devised, tremendous quantities of milk nutrients could be made available to these people.

Packages now used in shipping nonfat dry milk include wooden barrels and hard fiber drums lined with Kraft paper or polyethylene bags, containing 200 pounds or more; 50- and 60-pound drums, 50-pound heavy paper bags lined with polyethylene, and occasional 25-pound tins. The tins should be packed

in light, strong boxes. Particular attention should be paid to keeping the product dry. Except for extremely heavy users, the 60-pound units, or less, appear to be favored. These packages are easier to handle (sometimes cheaper to transport over interior roads), and there is less danger of hardening of the product after opening.

Only a gradual increase in the Venezuelan consumption of nonfat dry milk solids may be expected as long as its use is limited largely to industrial foods and ice cream. There will be some increase in its use in the Government's expanding school lunch, low cost and institutional feeding programs as soon as its use is understood and appreciated. If, however, the Government encourages its use for direct household consumption in small, inexpensive packages, the consumption of this product may be increased to several times the present rate.

While Canada and a number of soft currency countries (the Netherlands, New Zealand, and Denmark) are at present able to undersell United States exporters, only small amounts of Canadian nonfat dry milk had entered the market by late 1949.

The Reliquefaction of Milk in Venezuela

Although there have been four attempts made at establishing dry whole milk reliquefaction plants and one was in operation in 1947, there are no plants known to be operating at present.

The first reliquefying plant was established by the Government fluid milk syndicate to supplement the regular Caracas fluid milk supply during the dry season of 1947. The reaction of producers, consumers, and the press was disappointing. The output of the plant was low, and the cost as reflected in retail prices was high. The producers, suspicious that any attempt to reduce prices to consumers might mean a lower price at the corral gate, conducted a program of adverse propaganda. The names suggested by the Government and by the press implied that the product, if not wholly synthetic, contained something that was not too well understood. The dry milk used was reportedly not of the best quality. In addition to this, the consumers suspected the quality of the water used. They were able to produce the product at about the same price, using their known supply of purified water. Those who had depended on fresh milk were reluctant to shift to a supply which might not be continuous. Of a limited output, less than 20 percent was sold. Most of the population with enough money to buy dry whole milk continued to use that product.

The use of nonfat dry milk for reliquefaction is prevented by regulations of the Health Ministry which, in effect, prohibit adding anything but water to the reliquefied product. A ruling based on Food and Beverage Regulations by the Ministry prohibits the recombining of nonfat dry milk with any edible vegetable or animal fats (including butterfat). The Ministry also has indicated a lack of personnel to make adequate periodic inspections of the product. Even if legal, any plan to recombine milk would not only have to overcome the opposition of producer organizations and the prejudice of consumers, but would have difficulty in securing enough fat under present allocation systems.

Cheese

Most of the cheese in Venezuela is made by hand on farms or cattle ranches throughout the country where the lack of transportation prevents the sale of fresh milk. Although it is made in many regions, and often bears the name of the section where produced (Llanero -- from the llanos, Maracay, Perija, etc.) the process of manufacture is generally about the same. 8/ The vat is a hollow log. It is filled with cow-warm milk which is curdled with rennet tablets dissolved in salt brine, and thoroughly mixed. When, in 30 to 45 minutes, the curd is sufficiently coagulated, it is gently squeezed in the whey until it forms a fairly firm roll. It is then removed, cut into large slabs, kneaded some more and salted. After two applications of salt are thoroughly distributed through the curd in each of two kneading operations, the curd is solidly packed into cube-shaped boxes, generally about 15 inches on the side, perforated at the bottom, and lined with heavy cheesecloth which overlaps the cheese. Pressing is done with a heavy rock or a suitably weighted lever. The cheese is trimmed after one day's pressing and returned to the box for further pressing for several days, after which the white cheese (queso blanco) is ready for market. The manner in which the cheese is processed is not only very unsanitary but reportedly causes excessive loss of fat. Being thoroughly salted and pressed, it is relatively hard and dry and keeps well for the limited time necessary before it is consumed. Since none of this cheese is cured, it is tough and hard to

8/ See Hunziker, O. F., and Hodgson, R. E., The Dairy Industry of Venezuela, The United States Department of Agriculture, October 1, 1942, pp. 39-44.

digest. A relatively small amount of local cheese is made of boiled curd. This type, known as queso de mano, is round in shape. There was recently constructed a cheese factory in the milk production area south of Lake Maracaibo in Zulia State. While this factory reportedly uses about 4,000 liters of milk daily, nothing is known about the type of cheese produced.

With cheese produced in probably every state of the country and data both on milk and cheese production unavailable, any guess made as to the annual output of Venezuelan cheese is subject to an extremely wide range of error. Hunziker and Hodgson published a figure of 23,841,000 pounds for the year 1941, provided by the Ministry of Agriculture and Animal Husbandry. A recent guess suggested by the United States Embassy, possibly applicable to commercial cheese in the years 1946 through 1948, was slightly less than 9 million pounds per year. On the basis of milk production and utilization estimates developed earlier in this report, and certain comparisons made with respect to relative quantities of dairy products sold in free markets of the Federal District, a 1949 cheese production estimate in the neighborhood of 15 million pounds is suggested. Actual production may be higher.

Cheese imports in 1949 appear to have approximated 5 million pounds (4.3 million estimated net) compared with about 5,300,000 pounds, (4.6 million estimated net) as furnished by the Director General of Statistics for 1948. The 1949 estimate is based on reported data through November, with a December estimate based largely on trade information.

On the basis of the above considerations, a total 1949 cheese consumption estimate of about 20 million pounds is suggested, a per capita consumption of about $4\frac{1}{2}$ pounds for the year (compared with over 7 pounds per capita in the United States). The domestic product is probably more generally consumed throughout Venezuela than any other dairy food, being a breakfast staple, at least outside the large cities, and is consumed with desserts as a general practice. As indicated above, it is sold to retailers in cube blocks about 15 inches on a side and is generally handled without outer packaging. In the free market, Llanero cheese was selling at about U. S. 57 cents per pound on March 2, 1950, and remained firm until the start of the current flush when prices declined to about U. S. 50 cents.

Most of the imported cheese is apparently sold in the larger cities generally to people of average or better incomes, including nationals, those of European extraction, and foreign colonies. Much of this market is reported to be quality-conscious.

Dutch Gouda is by far the most popular imported cheese. It is favored for its high and uniform quality and flavor, its keeping quality which permits its use for 2 or 3 months without refrigeration, and its increasingly favorable low price. Dutch Edam is also finding increasing popularity for much the same reasons. Both types are being imported from the Argentine, but at prices reported to be high relative to their flavor and keeping quality. In the free markets, Holland Gouda was selling at U.S. 81.6 cents per pound on March 2, about 3½ cents higher than the Argentine type. Dutch Edam, in 1/3- to 1-kilogram balls, sold at about U.S. \$1.00 per pound.

Parmesan cheese is being imported from both the Argentine and Italy. There is a relatively large consumption of Argentine Parmesan-type cheese by Venezuelans who find its quality satisfactory for use in the preparation of spaghetti, macaroni, and related dishes. A large Italian colony reportedly favors the cheese from Italy, although higher in price, because of its quality. Parmesan (probably Italian) was selling in the free markets at about U.S. 95 cents per pound in early March.

Cheese imports from the United States increased sharply after the war, and for the years 1947 through 1949 our reported exports, amounting to about 1,100,000 pounds annually, accounted for approximately 25 percent of the total Venezuelan imports (estimated net basis). However, this proportion was sharply reduced after the September (1949) devaluation of currencies in sterling block countries. The plentiful supply of dollars available to importers has attracted increasing imports from the Netherlands, Italy, and Switzerland, and imports from the United States are now believed to account for less than 15 percent of the total. Although there are as yet no quantitative limitations on cheese imports, all cheese is subject to payment of full import duty. Except in the free markets, there are no price controls.

American processed cheddar is the United States type which appears to have gained greatest popularity. It is estimated that about 70 percent of this cheese is sold in 5-pound loaves, mostly to bars and restaurants, where it is favored for its slicing and cutting qualities. A relatively smaller amount is cut into portions for direct sale to consumers by retail distributors. The smaller 1/2- to 2-pound packages are retailed largely for home use. It is sold both to the national and foreign population. The sale of this cheese has been limited to some extent by the lack of refrigeration in warehouses in all but the larger stores, and in homes. Recent increases in the construction of wholesale cooler space may facilitate greater sales of this product. The retail price per pound for American processed cheddar in regular markets was about U.S. \$1 in early March. Unless price disparity becomes too great, there appears to be a likelihood of at least a moderate market for processed cheddar and its blends for some time. The most satisfactory inner packaging to lend keeping quality to this product is reportedly tin or wax-laminated cellophane.

The market for natural cheddar cheese appears to be very limited. Of United States cheese exports to Venezuela in 1948 and 1949, natural cheddar cheese comprised less than 1 percent of the total. While there seems to be no criticism of its flavor, it is apparently favored neither for slicing nor keeping qualities. The same also appears true of Swiss cheese, the market for which gives preference to the Switzerland product. For hard and semi-hard type natural cheeses, greater emphasis should be placed on keeping quality. It is recommended that cheese processors make drier cheese with harder rind for this market. The use of microcrystalline wax is also recommended. It is reportedly superior to paraffin for this purpose.

Most dealers report some business in roquefort types from France and the Argentine and some from the United States. But while the price and margin are better, the market is limited.

There is also some demand for Camembert and an intermittent demand for Munster. The demand for processed spreads is moderate. Reportedly, cream cheese is too subject to spoilage for profitable sale.

Butter

The production of butter in Venezuela as indicated by official statistics has shown no increase since 1943. The 1949 production of slightly over 3,400,000 pounds was about 10 percent less than in 1948 and about 12 percent less than the previous peak in 1945. Butter imports in 1949, amounting to about 1,900,000 pounds (net), represented a decrease of nearly 60 percent from the 4,580,000 pounds (net) imported in 1948, the previous record. This decline reflected the inauguration of a quota system in October 1948 under which imports were permitted only at a specified ratio to purchasers of the local product. Based on United States export data, over 45 percent of the 1949 imports originated in the United States. The principal other suppliers were Denmark and Holland, with relatively small quantities from the Argentine and New Zealand.

As stated earlier, most of the butter is produced in six Zulia creameries with small quantities produced during the rainy season in the Caracas milkshed, notably at Maracay.

The production of farm butter is believed to be negligible. In food value and market prices, the returns from cheese are probably better. Heat and humidity and the lack of refrigeration would favor cheese. The taste and market for butter are found principally in the larger markets. The lack of butter know-how and a satisfactory price for farm-separated cream in the Perija district, the principal farm cream area, may furnish additional reasons for this belief.

While there are no data available with respect to year-end inventories, average annual supplies in the 3 years 1947-49 would indicate an annual consumption of around 6,500,000 pounds. Due to import restrictions, 1949 consumption may have been nearer 6 million pounds, or about 1.3 pounds per capita (compared with United States consumption of about 10.5 pounds per capita).

Sales of butter are limited largely to nationals and foreign colonies of high income, often through hotels and restaurants, and to oil company commissaries. Due to lack of refrigeration, the bulk of the butter, both national and imported,

is sold in tins. With the rapid growth of freezer and cooler space being provided by VBEC in its wholesale units at Caracas, Maracaibo, and assembly points, and with the Government's projected new Caracas wholesale market center with reportedly ample storage, there may be a trend toward the use of prints and cartons. The larger stores are also installing refrigeration.

Due to the existence of a generally recognized serious deficiency of edible fats and oils in Venezuela, this country has taken several measures aimed at encouraging the domestic production of fats of both animal and vegetable origin. Measures aimed at protection have included the restoration of full duties on imports and the establishment of quota systems under which all imports of lard and butter have required the issuance of prior licenses. Imports of margarine have been rather effectively restricted by import duties of Bs. 8 per gross kilo (over U.S. \$1.20 per pound, net). The duty on butter amounts to Bs. 2.2 per gross kilo (U.S. 33-35 cents per pound, net).

The present import ratio, announced in October 1949, permits import licenses to be issued for 200 pounds of butter to every 100 pounds of national butter purchased by the applicant. Although the ratio was relaxed at least twice during 1949, importers reported it increasingly difficult to obtain the necessary national purchase certificates because of the inability of the local creameries to furnish the requested butter. This appears to have led to certain marketing abuses, apparently including black market sales of certificates of purchase. With the advent of the 1950 spring flush, pressure on the part of local butter producers to raise the ratio of local to imported butter was renewed.

Butter and dry whole milk are the only dairy products subject to general price control. The price of national butter to wholesalers at the creamery, in tins of 383 grams each, is fixed at U.S. \$1.165 per pound; and in cases of 200 cans 175 grams each, (at U.S.) \$1.265 per pound. The wholesaler may charge the retailer 8 percent more than his cost, and the retailer may add 10 percent to his price. For imported butter, the wholesaler is permitted to charge the retailer 8 percent more than his cost, and the retailer may add 10 percent." ^{9/} The Caracas free market price in early March 1950 of local butter in 1-kilo packages was U.S. \$1.145 per pound. United States imported butter in cartons was retailing at U.S. \$1.08 per pound. There was virtually no change by mid-June.

The premium butter of Venezuela is a special brand of Danish product of good, uniform quality, the market for which has been established over a period of several years. This butter, packed in 385-gram cans, retails in the free markets for U.S. \$1.34 per pound and in 175-gram tins for about U.S. \$1.44 per pound. The local 383-gram tin sells for U.S. \$1.315 per pound. An imported competitor of United States butter packed in 1-pound tins was selling at U.S. \$1.02 (compared with the United States butter at U.S. \$1.08).

^{9/} Much information for this report has been obtained from current despatches of John H. Kempton, Agricultural Attache, United States Embassy, Caracas.

In general, imported butter is preferred over the national product, due in large part to the variable quality of the latter, although some Venezuelan creameries reportedly produce a product of good quality. While the United States is still the major country of origin for imported butter which enjoys general acceptance, our product is reportedly meeting with increasingly severe price competition from Denmark and the Netherlands. Argentine butter is reported to be not yet a serious competitor, due to its high price relative to quality. Occasional lots are also expected from New Zealand.

While the Venezuelan demand for butter is growing gradually and there is an expanding taste for good butter, educational or promotional work can accomplish little until the present structure of high costs, high import duties, and related restrictive measures are removed. The apparent inability of local production to respond to high prices and protective measures, however, implies that under present economic conditions, there will continue to be an import market for from 2 to 5 million pounds of butter, annually, for some time.

Condensed Milk

Venezuela's entire production of condensed milk, like that of dry whole milk, evaporated milk, and nonfat dry milk solids, is processed in the condensery-milk drying plant at Santa Barbara. It has been second in importance to dry whole milk in the output of that plant. Production in 1949, amounting to about 1,380,000 pounds, was only slightly less than in 1948, but was 26 percent less than the 1947 peak.

There are no separate current data available on quantities of condensed milk imported into Venezuela. The last year for which estimates were made was 1943, when imports amounted to about 7,300,000 pounds (estimated net). However, if United States prewar exports to Venezuela compared with the early postwar years may be taken as an indication, there has since been a considerable decline. Although United States exports of this product increased sharply during the first 8 or 9 months of 1949, this may have been in anticipation of the restoration of the full tariff on evaporated and condensed milk which occurred at about the end of the year. United States exports in 1949 totaled 819,000 pounds compared with a 1946-1948 3-year average of 118,000 pounds.

Most of this product is imported and distributed by relatively few firms. Its principal use is reported to be for infant feeding, especially in homes not equipped with refrigeration. With the use of dry whole milk already well established in most homes that can afford either product, most distributors can see little likelihood of an increase in the consumption of condensed milk. Of the relatively limited market available, it seems likely that the Netherlands, Canada, and possibly Australia and New Zealand will take an increasing share, due to their ability to under sell the American product.

Evaporated Milk

Production of this product in the Santa Barbara plant was negligible until 1948, when about 207,000 pounds were produced. The output in 1949 amounted to 564,000 pounds.

No separate data are available on Venezuelan imports of evaporated milk. Unlike the situation with respect to condensed milk, exports from the United States in 1949 of 1,084,000 pounds represented a sharp decline from such exports in 1948, and a further decline from 1947. While there is no information relative to imports from Canada or the Netherlands, this decline may be at least partly offset by increased imports from these countries.

Lacking data on total supplies, per-capita consumption cannot be estimated. However, it seems reasonable to presume that the consumption rate has not increased since 1947, and that 1949 total consumption is probably no greater than 2 million pounds. This is approximately the amount exported from the United States in 1947 when that country was virtually the only supplier. On this basis, consumption would be less than 0.5 pounds per capita.

As in the case of condensed milk, the general availability and use of dry whole milk probably has limited the use of this product largely to the feeding of infants. As in the case of condensed milk, there appears to be little likelihood of an increase in demand for this product in the near future. Not only is there the prospect of increased competition from Canada and the Netherlands, but there is a probability of some further increase in the output of the local plant.

Sterilized Fresh Milk and Cream

There was a sharp increase of United States exports of products in this category in 1949 over earlier years. Including frozen milk, canned sterilized cream, and other related products, United States exports have increased from 125,000 pounds in 1947 and 144,000 pounds in 1948 to 378,000 pounds in 1949.

Fresh frozen milk has been furnished in gradually increasing quantities to oil company camps and commissaries and has been purchased at high prices by well-to-do foreigners in the large cities. The market for this product appears limited to high income groups.

Imported sterilized whipping and table cream is reportedly being sold in increasing quantities, both to national and foreign consumers. Although the market for this product is potentially greater than that for frozen milk, it is obviously open only to those of more than limited means. Since Venezuelan classifications of dairy product imports differ from those applicable in the United States, before any program of exportation is started, it may be well to consider the procedure outlined under the section, Some Problems Facing States Exporters of Dairy Products and Suggestions Relative to Their Solution.

Salient Points in Venezuela's Immediate
Business Outlook

No restrictions are anticipated on the purchase and sale of dollar exchange. Barring sharp economic reversals, the Central Bank of Venezuela, the sole buying and selling agent of the Government, is expected to continue to hold large reserves of gold and foreign exchange for at least the next few years.

Venezuela's income from oil and its derivatives, which account for well over 90 percent of the value of all exports, is expected to continue not greatly different from that in 1949 in the near future if the present course in production and prices continues.

While oil production declined from the monthly peak rate achieved in January of this year, if the recent rate of production is continued, total production in 1950 may not be much different from that in 1949. Most of the effects of a strike in early May, reportedly involving more than half of the country's oil workers, have been overcome. The production of American-owned petroleum companies was voluntarily reduced in February in an attempt to forestall any restrictive action with respect to oil imports on the part of the United States Government, although a recovery in output has since been made. This action reportedly was in line with reductions made by producing companies in the United States. On the other hand, a large Dutch-British concern has been expanding its Venezuelan production in supplying the increasing needs of sterling and other soft-currency countries. The recent removal of British gasoline rationing and the reported pro-rata sharing of the resulting increase in consumption with American companies may stimulate Venezuelan production as well as that of the Middle East. However, it should be remembered that not only must the entire Venezuelan production be paid for in hard currency at high labor, processing, and transportation costs, but there is the question of the extent to which these markets will be supplied by lower-cost oils of the Middle East. In addition, it is not yet known how much the recent termination of the United States-Mexican trade agreement will affect Venezuelan export.

Petroleum prices may also continue about steady in the near future. With recent cut-backs in the production of light crude petroleum and with United States consumption exceeding that of last year, prices of oils in this category are expected to continue at least steady. Prices of medium and heavy crude oils (approximately two-thirds of Venezuela's production), although slightly below 1948 highs largely as a result of recent moderate winters in eastern United States, are not expected to average much below those of 1949.

With less than 2 percent of the total Venezuelan population directly employed by the petroleum industry, the over-all importance of oil to the Venezuelan economy may at first appear overstated. However, when it is understood that the direct revenues (royalty, income taxes, and foreign exchange differential) derived by the Government from the petroleum companies in 1949 accounted for 60 percent of the Government's total revenue, it may be seen that any reduction in the production or price of oil has broad implications. This percentage apparently does not include revenues from exploration and initial production taxes, and of course would not include that portion of individuals' income taxes derived directly or indirectly from oil. In addition, it does not include any allowance for the amount by which the value of import duties and consumption taxes are affected by purchases stimulated by incomes derived directly or indirectly from oil.

An increasingly broadened base of consumer purchasing power is suggested by Venezuelan labor's recent gains in wages, social insurance, profit-sharing, and bonus payments. It is also reflected by records or near-records in the volume of production in some local industries and of retail sales, in the large net income from business and commerce, in record Government expenditures, and in the liberal credits available from commercial banks in 1949.

With petroleum and its derivatives accounting for over 90 percent of the total value of exports, the outlook for returns from coffee and cacao (accounting for most of the remainder), while favorable, is relatively unimportant.

Barring the taking of additional restrictive measures on imports of oil to the United States and barring the development of limiting factors relative to the market in Europe and other sterling and soft currency areas, the income from Venezuelan oil probably will continue sufficiently great to permit the unrestricted use of dollar exchange for imports of dairy products in the near future. 10/

Characteristics of Venezuelan Markets for Dairy Products

A. Market Areas 11/

There are three primary marketing areas in Venezuela centering around the three urban areas from which most imported dairy products would logically be distributed.

10/ However, as noted elsewhere, the use of dollar exchange for dairy product imports is being retarded by certain restrictive measures.

11/ These comments are based partly on "Marketing Areas in Venezuela" by H. Theodore Hoffman, International Reference Service, O.I.T., Vol. 3 No. 42, October 1946, and Supplement No. 18 to International Reference Service Vol. VI by Frederick Maresch, August 1949.

The Caracas area comprises the populous north central portion of the country. In addition to the Federal District and the States in the Central milkshed, it includes Lara, Yaracuy, the eastern part of Falcon, Portuguesa, Cojedes, Barinas, and the northern part of Guarico. Sometimes included with this general area, but important chiefly in the domestic trade, is a northeastern area comprising the northern part of Anzoategui (served by ports of Guanta and Puerto la Cruz, often through Barcelona), Sucre, served by the ports of Cumana and Carupano, and the northern part of Monagas, served partly by the above eastern ports.

Caracas, the financial and commercial center of Venezuela, is headquarters for most of the large commercial houses and wholesale importers, many of which maintain branch offices, stores, and traveling salesmen covering the entire country. Most of the important industries are located in this area.

The Maracaibo area, second in importance, includes the State of Zulia, the Andes States of Tachira, Merida, and Trujillo, and the western part of the State of Falcon. This area owes its importance to the petroleum industry, its growing agricultural trade, and to the lack of adequate transportation between Caracas and these areas.

The Ciudad Bolivar area comprises the lower Orinoco valley and the delta region. It includes the States of Apure and Bolivar, the territories of Delta Amacuro and Amazonas and the southern parts of the States of Guarico, Anzoategui, and Monagas. Imports to this area are generally transshipped from the island of Trinidad. Of less importance than the other two areas, and of small population, this area has little large-scale agriculture and a shortage of dairy products in some sections. It is largely dependent on river transportation. The large steel companies operating in this area presumably are supplied by their offices in the United States.

B. Economic and Social Characteristics

Until the mid-1940's, Venezuelan tariffs, originally intended to serve as a protection to local industry and agriculture, were among the highest in the world. ^{12/} Duties, applicable to foodstuffs and other products, were reduced during the war. They became less restrictive, also, by virtue of being on a specific rather than an ad valorem basis, during a period of rising prices. Recently there again has been a tendency toward protective increases and, in general, tariffs have been sufficiently high to sustain relatively high cost operations. The cost of labor and transportation within the country is high. The cost of marketing, much of which has been through small, inefficient retail stores, has also been high.

Returns to local producers, however, have been relatively low. While caused mostly by serious transportation problems, this has been partly the result of high margins and marketing inefficiencies. In the Caracas market

^{12/} See "Economic Controls and Commercial Policy in Venezuela," U. S. Tariff Commission, Washington, D. C., 1945.

farmers supplying meats, dairy and poultry products, and other produce are required to remove their carts and trucks from the city by 9 o'clock in the morning. Obviously, this has meant that they could be exploited by merchants who withheld their purchases until the final hour. These conditions, and other inflationary influences relating to an oil economy have resulted in scarcity and extremely high prices of foods to the bulk of consumers.

In late 1946, under the pressure of food scarcities and high costs, the Government started a policy of permitting duty free entry for all preserved milk (evaporated, condensed, nonfat dry milk, and dry whole) and butter from all countries, on which exoneration was specifically requested.

At about that time there were also established a number of "free" markets in Caracas and other cities throughout the country to help reduce food prices and to furnish a place from which the individual producer might retail his products without rental costs. The Government not only fixes and publishes prices for merchandise sold in these markets, but acts as a retailer itself for a limited number of staple commodities. While the Government operation of these markets has not always been profitable, their use by small producers and their patronage by consumers has been popular and their business has continued to expand. These markets have been useful in increasing sales of national and imported dairy products at reduced markups to low income groups. Eleven markets are now in operation in Caracas and surrounding towns and cities. While the seven free markets in Caracas are now open 2 or 3 days a week, those in outlying towns are still being used only once weekly. Free markets are also understood to be operating in all other state capital cities and in about 10 other moderate-size towns. Maracaibo is understood to have two or three such markets.

In addition, Caracas and some of the other large cities have established large municipal marketing centers where moderate rentals are charged to producers and small merchants. A new wholesale market center is projected for the Caracas area with a refrigeration capacity of 157,000 cubic feet, compared with the 30,000 cubic feet now available at the Caracas Central Market. Additional plants are now under construction throughout the country.

It is important to remember that nearly all food marketing is done on a day-to-day basis and that little produce is held over. This practice has been the result not only of the generally inadequate storage available around market places in the past, the use of small stalls or stands, and the necessity of removing trucks and carts by mid-morning, but also of the low purchasing power of the bulk of consumers and the absence of refrigerators or other home cooling devices.

In an additional attempt to assist local producers in the marketing of their produce, the food distribution company (CADA) of the Venezuela Basic Economy Corporation opened a large wholesale warehouse with freezer, cooler, and dry storage in Caracas as a part of its general distribution program. A part of this space was to be used to provide storage space for farmers unable satisfactorily to dispose of their produce by the morning curfew. It is understood that a part of this space was to be leased commercially. Ownership of this warehouse recently was turned over to a Government corporation. It is understood that

CACA has also discontinued distributing through a large food center in one of the low income sections of Caracas where it sold in wholesale quantities to local operators and supervised the retail merchandising operations. However, a similar type of distribution center has been started in Maracaibo where CADA is understood to be expanding food sales in partnership with 2 local merchants.

Due to its importance in the distribution of food in Venezuela and reportedly other Central and Latin American countries, a few additional comments concerning this company (CADA) may be pertinent. It was organized for profit as one of the four principal operating companies of the Venezuela Basic Economy Corporation 13/primarily to centralize the purchasing of basic foods for the oil companies. In addition to its distribution to oil company commissaries and through the supermarket in Maracaibo, it operates as a wholesale distributor of foodstuffs to a large number of stores and shops.

About 50 percent of its supplies are purchased in Venezuela, and some are stored in large warehouses at Valera and Barquisimeto for distribution in Maracaibo and Caracas. An additional storage and distribution center is located at Puerto la Cruz for supplying oil companies and towns in eastern Venezuela.

Of the imported foodstuffs, about 75 percent of CADA's purchases are supplied by a VBEC purchasing agency with offices in the United States 14/. The balance is purchased in the open market.

In spite of the developments outlined above, the bulk of dairy products in Venezuela are still sold through small independent retail establishments where marketing margins are high and quantity discounts are rare.

An important characteristic of the Venezuelan market, as is the case in many Central American countries, is the pattern of income distribution. By United States standards, the income of the bulk of the population is extremely low. Over half of the Caracas population lives in virtual poverty. Conversely,

13/ Of the three other companies, operations of the milk distribution company (INLACA), were discussed above. A food production company (PACA) operates a poultry farm, two general farms and a large cattle ranch at scattered points in Venezuela. The cattle ranch, operated in the general farming area near Santa Barbara, at the south end of Lake Maracaibo, is principally concerned with flying out fresh beef under contract to oil company commissaries. All of its milk, the production of which is of minor importance, is sold to the nearby milk plant (INDULAC) for processing. A fourth company, Pesqueras Caribe C.A., is engaged in the processing and marketing of fish.

14/ Inquiries concerning sales to VBEC may be addressed to Post Office Box 2300, Bienville Street Wharf, New Orleans, Louisiana, where it is understood all contracts of purchase originating in the United States are made.

the percentage of families with high incomes is extremely small. Data on taxable Venezuelan incomes indicate that in 1945 fewer than 2 percent of the families had annual incomes in excess of \$3,000 compared with about 50 percent in that category in the United States. This appears the more significant when it is realized that the general level of prices is somewhat higher in Venezuela than in the United States. Until recent years there has been no appreciable number of families in middle income brackets. With the sharp increase of employment and income in petroleum and manufacturing industries, in distributive and service industries, and in clerical and related fields, a middle income class has been rapidly developing.

The bulk of imported dairy products shipped to the Caracas marketing area are consigned direct to large established wholesale merchants adequately capitalized to maintain large stocks and operating as sole representatives of the principal exporters of the United States and other countries. This practice may have developed partly as a result of the important position of responsibility assumed by the consignee in connection with the preparation of all invoice declarations and other documents necessary to dairy product importation. (See "Some Problems Facing United States Exporters") In the Caracas area, these merchants frequently sell and service retailers direct. These companies often have branches or salesmen covering other sections of the country, and orders for imports, which would not logically move through the Caracas area, are generally consigned directly to the customer, usually a wholesale distributor.

Some Problems Facing United States Exporters of Dairy Products and Suggestions Relative to Their Solution

The following paragraphs are not intended to anticipate or answer all of the problems facing exporters of dairy products to Venezuela. They are intended more to call attention to some of the conditions most frequently presenting problems to the exporter, and to offer some suggestions as to their solution.

I. Some Suggestions and Comments on Exporting Procedure

No attempt will be made to present the step-by-step procedures involved in the exportation of dairy products to Venezuela. The present complications of this trade are sufficiently great and changeable as to make highly advisable the securing of a thoroughly competent agent or representative to handle and advise on the measures necessary to comply with every existing regulation and to keep abreast of every change. Some of the important considerations in the procedure for exporting dairy products to Venezuela, however, are discussed below:

A. Prior to Starting the Export Program

1. Selection of a competent agent. A competent agent or representative in addition to being able to keep informed on all procedures and changes in import regulations, can effectively pioneer the introductory sales of a new product, can distribute the product through the most

- promising outlets without prejudice and discrimination, and can give or obtain helpful legal advice. He can prove invaluable by keeping abreast of current and probable import regulations and advise the exporter on how to avoid subjecting himself to fines or delays in his procedure with respect to export documents. In the selection of an agent, and in making other business contacts, exporters will find the World Trade Directory and other services of the Commercial Intelligence Division, O.I.T., U. S. Department of Commerce, very helpful. Through these services information concerning foreign firms may be obtained relating to type of organization, method of operation, number of employees, territory covered, and reputation in trade and financial circles.
2. Import licenses. ^{15/} For some products, presently including butter and dry whole milk, prior import licenses must be obtained from the National Supply Commission. Separate licenses are required for each commercial order (not necessarily each shipment) and are valid for a limited time during which the entire order must be completed. In addition to the value of the goods, these licenses should show insurance and freight charges unless a separate license is obtained covering these charges. The number of this license should be shown on the consular invoice or invoices covering the shipment.

These licenses may be cancelled whenever the Commission feels that conditions warrant it. (See discussion under Tariffs and Related Import Regulations.)

3. Sanitary Certificates. These certificates are required for all dairy products. They should contain a statement of a competent sanitary authority that the product is accepted for public sale and is consumed in the United States. This certificate must be legalized by a Venezuelan Consul. Under present regulations, once this certificate is accepted with respect to a given product, no additional sanitary certificates are required for subsequent shipments. (Special health certificates, required for each shipment, are discussed below under, Certificates of origin and health.)

^{15/} Information relative to the commodities subject to license and matters relating to the preparation of shipments may be obtained from the American Republics Division, Area Branch, Office of International Trade, United States Department of Commerce, Washington, D. C.

4. Securing approval of the Venezuelan Ministry of Health. The procedure in securing approval by this Ministry may vary from time to time, and the advice of your agent should be obtained. However, it is clear that, (1) an application or petition must be submitted for each brand of every product together with (2) three samples of the product, (3) a copy of the sanitary certificate discussed above, and (4) the specification of its components. The same procedure would apply to every change in brand name or composition. Milk products mixed with cereals, starches, fats, cocoa or other food items and all beverages, require a special statement of analysis. Presumably the agent can handle most of these details, and when the product is approved and registered, he should furnish the Health Ministry registration number to the exporter to be noted on the labels and on the consular invoice for each shipment of the product.

B. Prior to Shipment. In addition to the regularly required shippers export declaration (United States), consideration should be given to the following documents:

1. Consular invoice. Copies of the consular invoice filled out in Spanish on a prescribed form, and corresponding bills of lading must be presented to the steamship company which must number them before presentation to the Venezuelan Consul at the port of export for certification. Merchandise entitled to duty free entry requires a special invoice form.

Extreme care should be used in filling out these invoices. Be sure they are exact, complete, and entirely accurate. The specific description of the contents of each package must be in the exact Spanish terminology of the applicable part of the Venezuelan customs tariff and must show the corresponding tariff item number. Heavy fines are imposed for making inaccurate and incomplete declarations. Help in classifying commodities can be obtained from the Venezuelan Consulate or advance rulings on a given product applicable to all Venezuelan customhouses can be obtained on proper application (including the presentation of at least two samples) from the Ministry of Finance through the exporter's Venezuelan representative. The omission of essential data, errors in entries (including inconsistencies between the invoice data and those shown in the ships manifest) or arithmetical conversions of weights (pounds to kilograms), and other clerical errors are subject to fine, even though they are unintentional and signify no intent to defraud. 16/

16/ Under Venezuelan regulations the consignee named in the consular invoice is considered the importer and owner, and is responsible to the customs for all charges against the goods.

2. Bills of lading. These are considered the documents which prove actual ownership of the goods and, as stated above, must agree exactly with the consular invoice. Three copies, certified by the Venezuelan Consul at the port of export, are required, one of which must be presented by the importer, together with the corresponding consular invoice, for clearance of the goods in Venezuela. It is important to mail copies of the consular invoice, bills of lading, and other required documents to the consignee in Venezuela as soon as possible. The mails are sometimes slow, and if the required papers are not in his possession within 6 days following the arrival of the vessel, considerable expense and inconvenience may result.
3. Certificates of origin and health. Since the Venezuelan consular invoice form provides a separate column for entry of the country of origin, no separate certificate of origin is necessary. A special health certificate is required for each shipment of all dairy products. It must be an official certificate from the place of origin, stating that said products are derived from healthy animals and have been prepared in conformity with the sanitary laws of the country of origin, and must bear the consular stamp.
4. Other regulations. The above discussion applies to regular or freight shipments. In addition, there are special regulations on shipments by air and by mail and on free samples for distribution. Special regulations apply also to labeling, packaging, and marking of shipments. Additional information relating to these regulations and requirements can be furnished upon request from the Office of International Trade, Department of Commerce, or from the exporter's Venezuelan representative.

II. Some General Problems and Related Suggestions

1. Importance of establishing and maintaining high quality products. The fact that most Venezuelans consume daily a quantity of locally made white cheese should be taken more to indicate a need for this type of food than a lack of appreciation of quality. The general preference of nearly all classes for most of the standardized imported dry whole milk over the local product, the preference for Italian Parmesan over the Argentine product, and the premium paid for certain brands of standardized Danish butter over all competitors gives evidence of this fact. The outstanding preference for Dutch Gouda cheese attests the importance of establishing and maintaining high quality in dairy products destined for shipment to Venezuela. Regulations of the Venezuelan Ministry of Health likewise give clear evidence of the importance of exporting only those products which clearly satisfy our pure food and drug requirements and our marketing standards on foods for human consumption.

2. Some suggestions on containers and packages.

- a. Containers. Since the bulk of retail food sales in Venezuela are made on a day-to-day basis from small bodegas or stalls in public markets, most units should be put in small, inexpensive packages in line with a policy of rapid turnover. Small individual packages would make for greater sanitation in marketing, help maintain the identity of the product to the final user, help reach the purchasing power of the average Venezuelan, and avoid the deterioration likely to occur in homes without refrigeration. Recent experiences with dried milks suggest the possibility of developing a large market by using moisture- and odor-proof envelopes containing half-pound, quarter-pound, or smaller units of dry whole milk.

For consumer products packed in tin, it is recommended that the containers be sufficiently well made and well packed to permit virtual resealing once the can has been opened in order to prevent deterioration caused by heat, humidity, and insects. Sleeves or some other packing method should be used to prevent bending. Materials easily subject to denting should be avoided.

All dairy products are subject to special labeling requirements. They must bear the number of the sanitary permits. Those sold in closed or sealed containers must bear the net metric weight superimposed on any non-metric weight marking carried by the original package. For milk, the label must show whether whole or skim and state the fat content. The labels should be colorful and attractive, the brand name should be easy to pronounce, and the description and directions should be in simple, direct Spanish.

- b. Outer packaging. Since all dairy products are dutiable in Venezuela on their gross weight, emphasis should be placed on strong, light packing. Because of wide changes in heat and humidity, the use of soft or absorbent material should be avoided. Not only is there danger of resultant disintegration of the package, but if the gross weight upon arrival exceeds the stated weight by more than 3 percent, a penalty of twice the amount of import duty on the difference is assessed. Strong, water-proofed cardboard strapped or covered with chicken wire netting or light wire-bound wooden boxes are a satisfactory substitute for heavy wooden packing. The gross weight in kilograms must be marked on each package, and all packages must bear identifying marks and specify ports of destination.

3. Tariffs and related import regulations. No special concessions in tariff rates were accorded to United States dairy products under the reciprocal trade agreement between Venezuela and the United States, effective December 14, 1940, and the general schedule of Venezuelan

tariffs for these products is high. While the tariff on dry whole milk (about 8 cents per pound net) continues to be exonerated upon proper application, a recent decree requiring the purchase of 1 pound of domestic product (at a loss on each pound purchased) for 8 pounds of product imported has the effect of nullifying much of the benefits of such exoneration. The tariff rates on evaporated and condensed milks amounting to over 8 cents per pound (net) (\$3.40 to \$3.75 per case), on nonfat dry milk amounting to nearly 8 cents per pound, on butter amounting to 33-35 cents per pound, and on cheese amounting to about 19 cents per pound, not only furnish an unusually high degree of protection to local industry, but act as deterrents to the consumption of these products. Except for dry whole milk (see discussion elsewhere) and for dairy products admitted free under specifically approved projects for further processing, the full tariff is chargeable against all imported dairy products at the present time.

In the evaluation of import regulations, besides the tariff schedule and related costs, attention should be given to present and prospective quantitative restrictions and licensing. In line with the Government's Three-Year Plan, initiated in 1938 to develop the industrial and agricultural resources of the country, among other objectives, the Government has placed restrictions on certain dairy products from time to time.

Import permits were first required for butter in 1940, but both licensing and the collection of import duties apparently were discontinued during the wartime period of food scarcity. Prior import licenses were not again required until January 1946. In mid-October 1948, most existing butter import licenses were cancelled, and new licenses were issued only to those who could prove the purchase of 2.4 units of national butter to 1 unit of imported butter. While butter imported under this "quota" was exonerated from the payment of duty, no "ex-quota" butter was permitted entry by full payment of duty. This ratio has been changed from time to time on a basis of current and prospective supply conditions. Exoneration of butter duties apparently was discontinued in 1949. There are no indications that evaporated or condensed milk have ever been subject to prior import license nor to quantitative restrictions. Exoneration was granted on these products from November 1946 until the first of this year, when they again became subject to full duty. There is no indication that any exoneration of duties on cheese and milk base baby foods has been applicable since the war, nor that these products had been subject to any quantitative limitations. However, as noted above, it is important that the exporter keep closely abreast of current and probable import regulations of all kinds. The suspension of imports or the reimposition of customs duties on a product customarily exonerated from such duties are not always announced in the official Gaceta or Government register. They are sometimes merely announced currently in newspapers and on occasions become effective without public announcement.

Possibilities of National Action

A. Notes on Production and How to Achieve it.

There are at least six areas in Venezuela where cattle have long been successfully raised and in which the raising of beef or dairy herds can make an increasingly important contribution to rural welfare and to the national well

being. If the most desirable of these areas were properly developed, the production of milk and dairy products could be sufficiently great to meet the entire needs of the country 17/. In some areas where erosion has become a big problem as in the Andean Highlands, dairying, with its use of pastures and legumes, can plan an important part in the Government's program of rehabilitation and erosion control.

The Venezuelan Government has made much progress, through the introduction of imported purebred dairy cattle, in the establishment of foundation herds at experiment stations and schools. From these herds crossbred bulls have been going into service in all parts of the country. Much progress has been made in the control of pests and disease. Through experiment stations and extension workers, more efficient and sanitary methods of production have been achieved, and better herd management and feeding practices have been effected. A number of progressive breeders are now operating up-to-date dairy farms.

Although no recent census of cattle numbers in Venezuela has been made, the number of head per hundred of population is at least as great as that of the United States 18/. Thus, the fact that both beef and dairy products are imported in sizeable quantities suggests that more could be done in this country of abundant agricultural possibilities to increase the production of both. 19/

Presumably the development of dairy-type herds will continue in and around the large cities where transportation is available and fluid milk marketing has been developed. In other areas where transportation and marketing will continue to be a problem, emphasis probably will have to continue to be placed on dual-purpose cattle for some time.

In the policy of encouraging Venezuelan production of milk and other products, it is understood that in principle, the Government favors the use of subsidies rather than the regulation of imports.

The use of protective tariffs and import quotas tied to purchases of the national product as an incentive to greater production appears to have accomplished little, in recent years, toward gaining greater national output. In some cases these actions seem to have resulted in short supplies, high prices to consumers, and serious distribution problems.

17/ These regions, discussed in The Dairy Industry of Venezuela by Hunziker and Hodgson, are: (1) the Federal District and parts of the State of Miranda, (2) the Lake Valencia area in the States of Aragua and Carabobo, (3) the southern basin of Lake Maracaibo, (4) the valley of the Rio Yaracuy and adjacent coastal areas, (5) the Andean Highlands and (6) the Gran Llanos or plains.

18/ The total continental United States population of 150,161,000 and the 80,277,000 cattle on farms January 1, 1950, indicates an average of 53.5 cattle per hundred people in this country. Even if cattle numbers have decreased to the 2.8 million head estimated by Walton in 1940, with a present Venezuelan population of 4,600,000, there would be over 60 head of cattle per hundred people in Venezuela.

19/ For possible actions to increase milk production and improve production conditions, see Appendix A.

It seems clear that the use of a direct subsidy offers some rather distinct advantages:

- a. Its use would be cheaper to the national economy. Since the number of producers entitled to subsidies is relatively small, subsidy payments could be simple, direct, and easy to administer. This would minimize administrative expense. It would avoid costs both to the Government and to importers of the holding of hearings, establishing quotas, the issuing of licenses, and verifying of purchases, as well as other problems which arise in connection with the encumbrance of imports.

It would reduce the cost of vital foods to many thousands of low income families whose diets are low. Anything which reduces supplies or raises costs of importing is bound to be reflected in higher prices to the mass of consumers. While these costs are not a direct drain on Government funds, they are additional costs that must be borne by those who can least afford to pay them.

It would avoid any necessity of guaranteeing processing and marketing margins to the manufacturer or distributor. Such guarantees would not only necessitate a considerable amount of cost analysis and auditing without any assurance of encouraging greater milk production but might eliminate the incentive to efficiencies in plant and marketing operations.

- b. This method would offer greater flexibility to meet changing conditions. Subsidy rates could easily be adjusted in cases where, as in fluid milk markets, rates have been so high as to induce production above the quantities which could be sold at prices satisfactory under existing cost conditions. They could be adjusted readily to give the producer a guaranteed unit return. They could be adjusted to encourage a greater or more uniform seasonal production and could easily be adjusted by areas to the cost conditions of a particular milkshed.

In some areas, even though it may be found difficult at these cost levels to sharply increase production, subsidy rates could be used to encourage a sound and gradual growth.

A schedule of subsidy rates could be established under which payments would be greater to those following approved health or production standards.

Thus, direct subsidies appear to furnish a method of achieving a desirable production change, and a basis of the direct measurement of accomplishments made, without the danger of involvement in other more complicated problems.

B. Notes on Food and Nutrition.

The testimony of leading nutritionists of the Venezuelan Government at a nutrition conference in Montevideo in 1948 revealed that malnutrition prevails

throughout rural areas 20/. Milk, meat, fish, eggs, and vegetables are rarely consumed. While the shortage of important food elements varies from region to region, additional milk available in rural areas, especially in the dry season, could contribute much toward a balanced diet. Working people in urban areas also experience undernutrition. Even though food may be more available to the urban than to the rural population, studies have shown that signs of deficiency of niacin, riboflavin, and vitamin A do exist among urban workers.

Splendid progress in studying and meeting these deficiencies has been made by such organizations as the National Institute of Nutrition (INDA), the National Director of School Lunches, the Inter-American Council of Nutritional Education, the Institute of Experimental Medicine, and others.

However, it was stated in summary, at the conference mentioned above, that the following deficiencies still exist:

Caloric deficit	-	All over the country.
Protein deficit	-	All over the country.
Calcium deficit	-	All over the country.
Iron deficit	-	Due to parasites, rather than lack of food, in rural areas.
Iodine deficit	-	In Los Andes region.
Vitamin A deficit	-	All over the country.
Vitamin B ₁ deficit	-	All over the country but especially in the eastern plains.
Riboflavin deficit	-	All over the country and more frequent than other avitaminosis.
Vitamin D deficit	-	Mild--all over the country.
Combined vitamins deficit	-	All over the country, especially in children.

The palatability of dry whole milk is being increasingly appreciated by many thousands of lower income people. It can contribute much toward meeting deficiencies in calories, protein, calcium, vitamin A, vitamin B₁, riboflavin, and other elements. Apparently there is little problem in connection with learning its uses. The same apparently can be said, to some extent, of cheese, with which Venezuelans are familiar, and canned milks. Butter can be an important source of fat and vitamin A, to the extent that it is within consumers' reach.

For many of those who cannot hope to obtain whole milk products in any form, including large groups in rural areas and small towns, the relatively low cost of nonfat dry milk could make possible its general availability. It represents a palatable food (or beverage) containing an abundance of all of the elements of whole milk except the fat and vitamin A. As Government programs are giving increasing attention to other animal and vegetable fats, including red palm oil which contains both fat and ample quantities of carotene (vitamin A), it is suggested that further attention be given to the possibilities of encouraging the

use of nonfat dry milk. Even though fats may not yet be generally available, nonfat dry milk can contribute much to meeting other serious nutritional deficiencies. As stated by Hodgson and Hunziker, 21/ "the added availability of dried skim milk at a much lower price would assist in making milk solids available to a large group of consumers who most need this kind of food, but whose limited purchasing power has deprived them of the use of wholesome milk in other form..... In addition, by making the people milk-conscious, it would serve to benefit the Venezuelan dairy industry, when the industry is in a position to meet the entire needs of the country, by increasing the consumer demand for milk."

The use of this product, if adaptable, could considerably improve the food value of arepas, bean soup, banana or yuca flour breads or casabes, stews, and coffee. It could also be used as a nutritious beverage.

In order to be sure that it would not merely replace rather than supplement the use of dry whole milk or other foods containing fat, it is suggested that its use for direct human consumption first be limited, under direction of the National Supply Commission or similar agency, to a few sample cities and the results be observed. Another plan would be to issue stamps or certificates for purchase only to those known to be unable to purchase whole milk products in adequate quantities. Also, its use could be increased in school lunches in some sections, and the nutritional effects could be compared with other areas where little or no milk is used. Comparisons, of course, should be made not with conditions as desired, but with conditions as they exist.

If the results of its use appear clearly beneficial, the Government may want to consider encouraging its further use by the exoneration of duties, and by such activities as distributing it through all free markets and the inauguration of demonstration programs aimed at teaching both the why and the how of its use.

Assistance in these programs and in making this food available at low cost, if requested, probably would be given by the United States Government, by a number of international food and health organizations, and by the dairy industry.

C. Notes on the Effects of the Resolution of March 22 with Respect to Domestic and Foreign Powdered Milk, and Related Considerations

1. Effect on Venezuelan supplies of dry whole milk

A sharp reduction in imports appears almost certain. Under the terms of the Resolution it is clear that importers cannot afford to import outside the quota as long as national product is available. 22/

21/ Hunziker, O. F., and Hodgson, R. E., The Dairy Industry of Venezuela, United States Department of Agriculture, October 1, 1942, page 29.

22/ If the loss on the purchase and sale of one pound of national product amounting to about 1.2 Bs. were allocated to the corresponding 8 pounds of duty-free imported milk, this would result in a loss of 0.15 Bs. per pound of imported product. Since the import duty amounts to nearly 0.23 Bs. per pound (0.5 Bs. per kilogram), there would be a saving of about 0.08 Bs. per pound, by importing under the license and quota provision.

National production of dry whole milk amounted to little more than 1,000 metric tons in 1949 and exceeded 1,500 tons only in the peak year 1947. With imports limited to 8 times national production, total supplies will amount to from 9,000 to 13,500 tons. This represents from 50 to 75 percent of the amount the United States alone exported to Venezuela in 1948 and 1949. If the ratio applies to gross weight, this would reduce allowable net imports to a ratio of less than 7 to 1, as the net weight amounts to from 70 to 80 percent 23/.

It seems clear that dry milk will be imported by payment of the duty only when supplies become sufficiently short to increase prices to a level somewhat higher than the competitive price would be on dry whole milk imported under the license and quota provisions.

Whether it is the result of the operation of the present quota ratio or of the increased importing and marketing costs, it seems clear that a significant reduction in imports will occur.

There is also a question whether national production of dry whole milk will be appreciably increased. The only way the local processor-distributor can profit from production of the national product is through sales to importers. It is unlikely that the processor will be willing to sell increasingly larger quantities to retailers at a loss of Bs. 0.3 to 0.6 per 454-gram can, unless such sales are necessary to obtain licenses for duty-free milk. If independent importers find it necessary to reduce imports and purchases of the national product under the terms of the regulation, the processor-distributor will find the output of the national product increasingly burdensome. There would then be a tendency to divert milk to the less unprofitable products--condensed and evaporated milks and butter-powder (nonfat)--thus retarding the manufacture of dry whole milk.

As indicated earlier, it is doubtful whether milk receipts at the condensery-dry milk plant will increase appreciably. Even though total receipts equal those of the previous peak in 1947, when prices paid producers were about the same as at present, this may represent partly a diversion of milk from cheese and other products in the area. In addition, it should be noted that the returns from milk represent only a small part of the total income from the cattle ranches where the main product is beef, and that both labor and production costs have increased since that time.

Thus, with a reduction in imports from a year earlier of up to 5,000 metric tons a definite probability, and with little likelihood of an increase in national production of 1,000 tons, a shortage of dry whole milk in Venezuela appears virtually certain.

23/ In connection with the determination of import ratios for a particular kind of conserved milk, it may be found valuable to obtain separate import data for each product, since each has different uses, prices and problems.

2. Effect on prices and consumption

The recent prices of imported dry whole milk were made possible not solely by virtue of the volume of current consumption, but by prospects for the volume which might eventually be sold. Up to the present time this country has been able to take advantage of the best features of large-scale production and marketing, to obtain dry whole milk at prices lower than elsewhere in the Caribbean area, if not in the world. Restrictions of any kind cloud the prospect and remove part of the incentives for price reduction. With the majority of the population of small towns and rural areas unable to buy fluid milk within the present range of economic costs, this food represents a promising means by which Venezuelan people can obtain the food value of whole milk.

The effects of the present program limiting duty-free imports to a specified ratio of the national product purchased will almost certainly increase to consumers. Some of the contributing factors would include:

- a. The loss of opportunity and incentives for further large-scale expansion.
- b. An appreciable reduction in volume of imports and of sales under the present allocation ratio with a corresponding increase in unit marketing costs.
- c. Increased costs involved in the administrative work necessary to comply with the program.
- d. The absolute loss per pound on total marketings necessary in the purchase and sale of the national product.
- e. The additional expense of marketing the national product by several distributors instead of the usual one of two.

3. Effect on Foreign Trade in Petroleum and Dairy Products

This type of restriction may also have an eventual bearing on the outlook for Venezuelan exports of petroleum. Considerable attention and discussion is given from time to time, in the United States, to the extent and nature of petroleum imports from Venezuela. In these discussions, the nationwide support of the dairy industry of the United States, with much in common with Venezuela, could prove to be a valuable ally in the case for maintaining freer trade between the two countries. This especially could be true if that industry believed that the Venezuelan Government was encouraging free or equitable trade among all importers of dairy products.

Appendix A

Many suggestions concerning the introduction and application of practices aimed at improving the production of milk and dairy products are discussed in Manual De Lecheria Para La America Tropical by O. E. Reed and R. E. Hodgson, Publication TC-280, Department of State, U. S. A., and in The Dairy Industry of Venezuela by O. F. Hunziker and R. E. Hodgson, U. S. Department of Agriculture, October 1, 1942.

Some possibilities which appear worthy of early consideration are:

1. The establishment of a systematic, periodic census of agriculture for all classes of livestock, livestock products, and crops, including the selection of areas for making intermediate sample censuses.
2. A greater attempt to impress dairymen with the value of keeping and using adequate production records of milk cows as well as bulls, and the fencing out of all unproven bulls.
3. The inauguration of a broad program aimed at teaching the dairy farmer and his assistants to appreciate and practice sanitary and efficient methods of milk production. This may be aided by a program of Government-sponsored apprenticeship, encouraging farm boys to work on the more highly developed dairy farms and experiment stations for a year or more before returning to their own herds.
4. The encouragement of rotation and improved pasture management, including the development of improved strains of grasses and legumes, which in some areas could furnish a year-round supply of cheap nutrients. For some areas, affected by seasonal droughts, much could be done through plant breeding to develop later maturing strains to extend the use of pastures.
5. Better and more widespread use of hay and silage, including a more general use of trench silos.
6. With respect to cheese production, further consideration could be given to a program aimed at establishing small, sanitary cheese plants scattered throughout the country, wherever there is no direct market for milk, as suggested by Hodgson and Hunziker. Such a program would mean less loss and waste in processing, a considerable improvement in sanitation, and would make possible a greater saving of butterfat for use in the Venezuelan diet.

